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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,126	06/16/2005	Thomas Hasskerl	272598US0PCT	8970
22850	7590	05/19/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
HARLAN, ROBERT D				
ART UNIT		PAPER NUMBER		
1796				
NOTIFICATION DATE		DELIVERY MODE		
05/19/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/539,126

**Applicant(s)**

HASSKERL ET AL.

**Examiner**

Robert D. Harlan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1-5, 7-12 and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brehm et al., U.S. Patent No. 5,700,576 (hereinafter "Brehm"). Brehm teaches a coating

composition comprising a prepolymer comprising an alkyl (methacrylate) and sulfur compound containing at least three thiol groups, multifunctional acrylates, thinner (diluent), UV-initiator and customary additives. See Brehm, Abstract; col. 3, lines 23-60. Brehm also teaches the use of TPMA, 2,2,3,3-tetrafluoropropyl methacrylate. See Brehm, Table 1. Brehm makes it clear that TPMA may be used in addition to a solvent thinner, thus, meeting the requirement of (B) and (E) diluent. The present invention differs from Brehm in that the present invention requires 0.2 to 10 wt.% 3,3,4,4-tetrafluorobutyl methacrylate.

4. The basic requirements of prima facie case of obvious are: (1) there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP 2143. "There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." See In re

Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). Although Brehm discloses a homologue of the claimed fluoroalkyl (meth)acrylate, based on the specification as a whole a polymer chemist of ordinary skill in the art would be motivated to modify Brehm by making a one carbon extension on the side chain of the fluoroalkyl (meth)acrylate. Such modification would be obvious because one would have a reasonable expectation of success that 2,2,3,3-tetrafluoropropyl methacrylate taught by Brehm would be similarly useful and applicable the fluorobutyl (meth)acrylate. The Applicant has not demonstrated unexpected results when comparing 2,2,3,3-tetrafluoropropyl methacrylate and 2,2,3,3-tetrafluorobutyl methacrylate. Therefore, claims 1-20 and 22-23 are deemed as being unpatentable over Brehm.

5. Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brehm et al., U.S. Patent No. 5,700,576 (hereinafter "Brehm").

6. Brehm discloses a moulding composition having the same limitation features of the claimed invention. Although Brehm does not disclose all the characteristics and properties (e.g. transparency, weathering stability, impact strength) of the

claimed moulding, based on the substantially identical components, the Examiner has a reasonable basis to believe that the properties claimed in the present invention is inherent in the mouldings disclosed by Brehm. Because the PTO has no means to conduct analytical experiments, the burden of proof is shifted to the Applicants to prove that the properties are not inherent. See In re Fitzgerald, 619 F.2d 67, 205 USPQ 594 (CCPA 1980); In re Best, 195 USPQ 430 (CCPA 1977); In re Napier, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995).

7. The claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). However, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. See In re Rijckaert, 9 F.3d. 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessary due to optimization of conditions, not what was necessarily present in the prior art). "To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in

the thing describe in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" See In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

8. One of ordinary skill in the art would be motivated to have arrived at the claimed moulding composition, because it appears that the claimed moulding compositions are within the generic disclosure of Brehm containing all the features of the claimed moulding and a person of ordinary skill in the art would have expected all embodiment of Brehm to have similar properties. Applicant has not demonstrated that the differences, if any, between the claimed moulding composition and the moulding composition disclosed by Brehm give rise to unexpected results. The evidence presented to rebut the prima facie case of

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obviousness must be commensurate in scope with the claims to which it pertains. See In re Dill and Scales, 202 USPQ 805 (CCPA 1979).

9. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brehm et al., U.S. Patent No. 5,700,576 (hereinafter "Brehm") in view of Hicks, U.S. 3,960,824 (hereinafter "Hicks"). Present claim 6 differs from Brehm in the selection of sulfur compound. Hicks teaches in analogous art a polymer containing an acrylate and pentaerythritol tetrathioglycolate for coating composition. See Hicks, Example 9. In view of Hicks, one having an ordinary skill in the art would be motivated to modify Brehm by using a sulfur compound, pentaerythritol tetrathioglycolate because the sulfur compounds are employed in a substantially identical manner. Such modification would be obvious because one would expect that the use of sulfur compounds as taught by Brehm would be similarly useful and applicable to the pentaerythritol tetrathioglycolate taught in Hicks.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert D.



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Harlan whose telephone number is (571) 272-1102. The examiner can normally be reached on Mon-Thu, 10 AM - 8 PM.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David W. Wu can be reached on (571) 273-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert D. Harlan/  
Primary Examiner,  
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rdh